Lin, Cindy

From: Butcher, Jon <Jon.Butcher@tetratech.com>

Sent: Thursday, June 20, 2013 5:09 AM

To: Lincoln, Ann; Lin, Cindy Cc: King, Amy; Paul, Michael

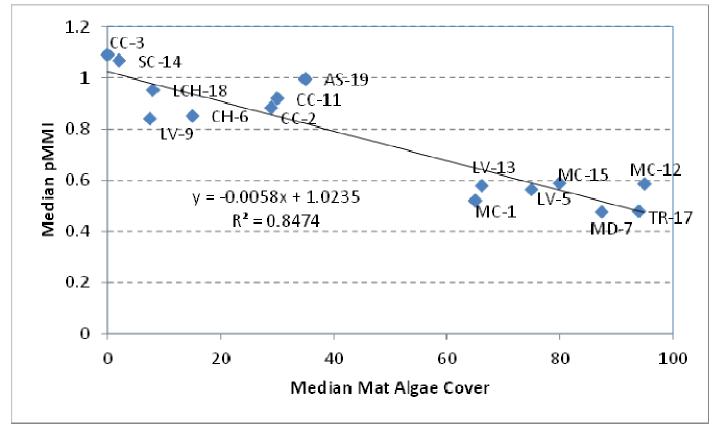
Subject: Malibu SI

Attachments: MMI-vs-Algae.xlsm

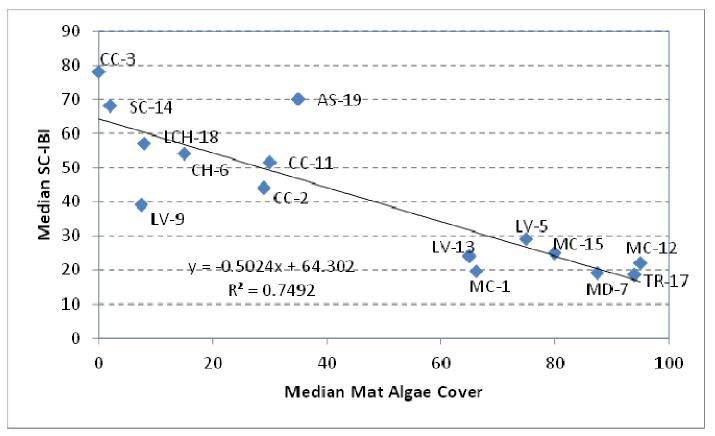
Importance: High

A comment from Mike reminded me that we had overlooked something very important, which was to look at the correlation of mat algal cover and bioscores at the Heal the Bay sites. There's a lot of noise in individual observations, but when we look at the site medians a strong and clear pattern emerges showing a negative correlation with high R2 value (see below). This would seem to greatly strengthen the logic in our causal analysis for nutrients and should go into both Section 8.3 and the SI writeup. As Ann has control of the document today I will let her insert it.

The relationship is strongest for pMMI:



It's also pretty strong for SC-IBI:



Note that the results pretty much break into two groups in which the really poor bioscores are associated with the sites with mat algae cover > 60%, which appears to validate the threshold proposed in the 2003 TMDL.

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